

REMARKS

Examiner Vinh is to be thanked for careful review and examination of applicant's invention.

Favorable reconsideration of this application in light of the above amendment and the following remarks is respectfully requested.

Claims 1-20 are pending in this application. No claims have been allowed. No claims have been cancelled

Claim Rejections – 35 U. S. C. § 103

2. The Examiner has rejected claims 1-7 and 9-11 under 35 U. S. C. §103(a) as being unpatentable over Zhao et al. (US 6,100,184; hereinafter "Zhao") in view of Hsiao (US 5,968,842; hereinafter "Hsiao"). Applicant acknowledges in general the teachings of Zhao in view of Hsiao as cited by the Examiner.

In response, applicant asserts that the teachings of Zhao do not read on applicant's invention as claimed and disclosed in the instant application . The Examiner has stated {p. 2, lines 12-14) that Zhao teaches :

“forming over the lower layer 13 and upper layer 14, an interlevel dielectric (ILD) layer 15 (silicon dioxide) (col 6. Lines 23-25)

forming over the IDL layer a photoresist mask pattern 22 to define a subsequent via opening and trench opening over the contact region...”

However, Zhao teaches the formation of a photoresist layer 16, an additional dielectric layer 18 at and an opening 17 at this point (col. 6, lines 30-41), followed by at least two more dielectric layers 18 and 19 (col. 6, lines 53-67: col. 7, lines 1-5) before photoresist layer 22. These limitations are further claimed in Zhao’s Claim 1. Applicant’s invention as claimed and disclosed does not require these additional two dielectric layers which are integral to Zhao’s teaching. Therefore, applicant asserts that the teaching of Zhao does not read on applicant’s invention, and may not properly be used singly or in combination with Hsiao under 35 U.S.C. § 103(a) as a basis for rejection of applicant’s claims to applicant’s invention.

In light of the foregoing response, applicant respectfully requests that the Examiner’s rejection under 35 U.S.C. §103(a) of applicant’s claims 1-7 and 9-11 as being unpatentable over Zhao in view of Hsiao be withdrawn.

3.. The Examiner has rejected claim 8 under 35 U. S. C. §103(a) as being unpatentable over Zhao in view of Hsiao and further in view of Sliwa et al (US 5,192,715; hereinafter “Sliwa”).

Applicant acknowledges in general the teaching of Zhao in view of Hsiao and Sliwa as cited by the Examiner.

In response, applicant respectfully submits that the limitations of Zhao’s teaching as outlined in Section 2 above do not read on applicant’s invention as disclosed and claimed in applicant’s independent base claim 1 and dependent claims 2-11. Therefore, since each and every limitation of applicant’s invention as disclosed and claimed in applicant’s base claim 1 is carried by

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the subsequent dependent claims including applicant's claim 8, applicant asserts that the teaching of Zhao singly or in combination with that of Hsiao and Sliwa may not properly be used as a basis under 35 U.S.C. § 103 (a) to reject applicant's claim 8 .

In light of the foregoing response, applicant respectfully requests that the Examiner's rejection of applicant's claim 8 be withdrawn.

4. The Examiner has rejected claims 12-20 under 35 U. S. C. §103(a) as being unpatentable over Zhao in view of Hsiao and further in view of Cronin et al. (US 5,759,911; hereinafter "Cronin").

Applicant acknowledges in general the teachings of Zhao in view of Hsiao and further in view of Cronin.

In response, applicant respectfully submits that the teaching of Zhao, as discussed in Section 2, do not read on applicant's invention as described and claimed in applicant's independent base claim 12 and dependent claims 13-20. As already pointed out in Section 2 above, the method taught by Zhao employs an additional two dielectric layers over those as described and claimed in applicant's independent claim 12 and dependent claims 13-20 thereon. Therefore, applicant asserts that the teachings of Zhao singly or in combination with Hsiao and Cronin may not properly be used as a basis under 35 U.S.C. §103(a) for rejection of applicant's claims to applicant's invention as disclosed and claimed in applicant's independent claim 12 and dependent claims 13-20.

In light of the foregoing response, applicant respectfully requests that the Examiner's rejection under 35 U.S.C. §103(a) of applicant's claims 12-20 over Zhao in view of Hsiao and further in view of Cronin be withdrawn.

Other Considerations

Applicant acknowledges additional prior art of record cited by the Examiner but not employed in rejecting applicant's invention: (1) Kano (U.S. Patent No. 5,380,679); (2) Won et al. (U.S. Patent No. 5,451,543); and (3) Cronin (U.S. Patent No. 5,818,110).

No fee is due as a result of this amendment.

SUMMARY

Applicant's invention as claimed within applicant's claims 1-20 is directed towards a method for fabrication within a substrate employed within a microelectronics fabrication an a dual damascene interconnection layer, with attenuated damage to conductor layers within the substrate. A two-level composite etch stop layer and interlevel metal dielectric (IMD) layer are employed which permit the formation of trench interconnection patterned layers with attenuated degradation of underlying contact stud layers within the substrate. The prior art of record employed in rejection of applicant's claims to applicant's invention neither singly nor in combination reads upon or teaches each and every limitation within applicant's claims 1-20 to applicant's invention.

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CONCLUSION

On the basis of the above amendments and remarks, reconsideration of this application, and its early allowance, are respectfully requested.

Any inquiries relating to this or earlier communications pertaining to this application may be directed to the undersigned attorney at ⁸⁴⁵~~914~~-452-5863 or Mr. George Saile, Esq. (Reg. No. 19,572) at ~~914~~-452-5863, at the Examiner's convenience.

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Respectfully submitted,



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